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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,378	01/22/2001	Yukio Kuroiwa	Q62756	1049

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EXAMINER

KIM, AHSHIK

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 04/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/765,378

Applicant(s)

KUROIWA ET AL.

Examiner

Ahshik Kim

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/03/03 (Response).
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Receipt of Response

1. Receipt is acknowledged of the response filed on February 3, 2003. Claims 1-5 remain
5 for examination.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

- 10 (a) A patent may not be obtained though the invention is not identically disclosed or described as
set forth in section 102 of this title, if the differences between the subject matter sought to be
patented and the prior art are such that the subject matter as a whole would have been obvious at
the time the invention was made to a person having ordinary skill in the art to which said subject
15 matter pertains. Patentability shall not be negated by the manner in which the invention was
made.

This application currently names joint inventors. In considering patentability of the
claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various
claims was commonly owned at the time any inventions covered therein were made absent any
20 evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out
the inventor and invention dates of each claim that was not commonly owned at the time a later
invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)
and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 25 2. Claims 1–5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohno et al.
(US 5,498,860) in view of Nakajima (US 5,408,531).

Ohno teaches a magnetic ticket/card as shown in figures 1A-4B (col. 3, lines 34+).

Simplistic card reader is disclosed in figure 5, wherein the two magnetic read heads 32 and 34 are installed along the card moving path 37. A magnetic write head 33 is positioned in between the two read heads (col. 6, lines 5+). Information such as the maximum amount, the balance, etc., can be stored on the magnetic layer (col. 5, lines 17+). The balance processing or other user-defined processing occurs as follows: the first reader 32 reads the magnetic information, CPU/processing unit updates the balance, and the write head write the updated information back on the magnetic layer, the second reader 34 reads the information back and compare it against the valued in CPU for collation/verification. Obviously, the sequence of read/write/read is performed at one swipe or movement of the card.

Ohno fails to specifically teach or fairly suggest of error checking utilizing parity bits. Although Ohno is also silent on demodulation and modulation of data, a magnetic data on the recording layer 21 have to be converted to proper electric signal, and modulated/demodulated to acceptable range of voltage.

Nakajima teaches a magnetic/optical card reader 21 (col. 1, lines 15 – 20) comprising a modulator 42, a demodulator 43 (col. 11, lines 22+), and error checking utilizing parity bits where each byte of the data is checked and corrected (col. 4, 59 – col. 5 line 38+).

In view of Nakajima's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ notoriously well-known error checking mechanism utilizing parity bits to the teachings of Miyashita in order to reduce errors read from the magnetic card reader. Moreover, the information carried in such cards often is a financial information such as account balance, remaining tokens, etc. etc. Keeping and maintaining the

correct information would save losses caused by errors. Users/customers can also be avoided from those error-caused hassles. Accordingly, such modification would have been an obvious extension as taught by Miyashita, well within the ordinary skill in the art, and therefore an obvious expedient.

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Response to Arguments

3. Applicant's arguments filed on February 3, 2003 have been fully considered, but they are not persuasive.

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In the response Applicant argues that the references do not teach or suggest the limitation of two magnetic heads arranged in a direction, in which each of the magnetic heads relatively moves with respect to the magnetic card, and taking the same data from the magnetic card and obtaining two modulated data with a single movement of the magnetic card relative to the magnetic heads (pages 1-3 of the Response).

15

As further acknowledged by the Applicant, the Ohno reference teaches a card processing apparatus comprising two read heads 32 and 34 arranged in direction with respect to the magnetic card as shown in figure 5. As further illustrated in figure 7, the balance is read by the read head 32, the balance is calculated according to the rules (i.e., fair tables, etc.) and updated by the write head 33, and the updated information is read again by the read head 34. Since the balance is different before and after the update, the Applicant argues that the Ohno reference fails to teach "reading same information" as described in claim 1 and 4.

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It is the Examiner's view that the Ohno reference discloses magnetic card processing apparatus with two readers reading the same data field. Although the information read by the

Art Unit: 2876

two reader heads can be different often times, it is also possible that they read identical data in some scenarios. Embodiments described in the Ohno reference includes telephone cards, a passenger railroad system, amusement arcades cards, amusement park cards, bus cards, and the like (col. 1, lines 13+). Although not explicitly explained, it is a well known practice in the above-mentioned embodiments that if a user choose not to use the desired service, no fee would be subtracted from the balance, and therefore, the updated balance would be same as the balance initially read. In view of the above, the read heads 32 and 34 disclosed in Ohno can read the same data and different data depending on a particular situation as to how the card is being used.

Applicant's response has been care fully considered, but they are not persuasive, and therefore, the Examiner has made this Office Action final.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2876

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (703)305-5203 . The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

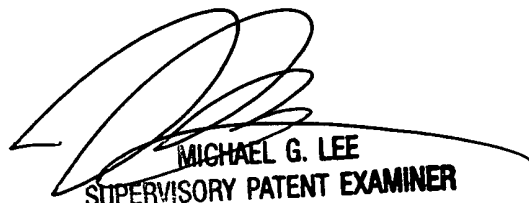
5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax number directly to the Examiner is (703) 746-4782. The fax phone number for this Group is (703)308-7722, (703)308-7724, or (703)308-7382.

10 Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

15 *All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

20 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Ahshik Kim
Patent Examiner
25 Art Unit 2876
April 1, 2003


MICHAEL G. LEE
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